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SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

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=>

Uploading C:\Program Files\Stnexp\Queries\VR1.str

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR

Structure attributes must be viewed using STN Express query preparation.

=> s 11 fam sam

SAMPLE SEARCH INITIATED 07:53:26 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED -

1 TO ITERATE

0

100.0% PROCESSED

1 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

ATCH \*\*COMPLETE\*\*

BATCH

COMPLETE

PROJECTED ITERATIONS:

1 TO 80

PROJECTED ANSWERS:

0 TO

L2

0 SEA FAM SAM L1

=> s l1 fam full

FULL SEARCH INITIATED 07:53:35 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED -

28 TO ITERATE

100.0% PROCESSED

28 ITERATIONS

1 ANSWERS

SEARCH TIME: 00.00.01

L3

1 SEA FAM FUL L1

=> d scan

L3 1 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN

IN 4-Quinazolinamine, 7-[3-(trifluoromethyl)-2-pyridinyl]-N-[6-

(trifluoromethyl) -3-pyridinyl] - (9CI)

MF C20 H11 F6 N5

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

ALL ANSWERS HAVE BEEN SCANNED

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

FULL ESTIMATED COST

ENTRY 68.60 SESSION 68.81

FILE 'CAPLUS' ENTERED AT 07:54:52 ON 02 MAY 2007

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FILE COVERS 1907 - 2 May 2007 VOL 146 ISS 19 FILE LAST UPDATED: 1 May 2007 (20070501/ED)

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=> s 13

=> d ti au abs so py 1-2

- ANSWER 1 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN
- TT Combination therapy comprising a heteroarylamine VR1 antagonist and a narcotic analgesic for the treatment of pain with reduced addictive side
- Herzberg, Uri; Cortright, Daniel; Hurtt, Mark M.; Krause, James E. IN GT

## \* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The invention relates to compns. comprising a nontoxic vanilloid receptor 1 (VR1) antagonist, optionally in combination with an addictive therapeutic agent, for the treatment of pain. Compns. and methods are further provided for inhibiting the development of tolerance to addictive therapeutic agents (especially narcotic analgesics) in patients treated with such agents, for minimizing adverse effects (e.g., dependence) resulting from treatment with such addictive agents, and for enhancing pain relief resulting from narcotic analgesic administration. Patients may be treated. with a VR1 antagonist before, during, or after administration of the addictive therapeutic agent to prevent, decrease the severity of, delay, or treat tolerance and/or other adverse effects of the addictive agent in the patient. Examples include synthetic methods and limited data for the preparation of representation heteroarylamine VR1 antagonists, as well as capsaicin receptor binding assays and numerous pain model assays. For instance, coupling of 7-bromo-4-chloroquinazoline with 2-amino-5-trifluoromethylpyridine, followed by addition of 3-fluoro-2-tributylstannylpyridine provided I. In a bioassay testing the inhibition of tolerance to morphine, rats receiving morphine plus II exhibited statistically significantly higher withdrawal thresholds than any other treatment group, indicating that the VR1 antagonist prevents tolerance to repeated morphine dosing. SO

PCT Int. Appl., 182 pp.

CODEN: PIXXD2

PY 2004

ANSWER 2 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN L4

Preparation of substituted quinazolin-4-ylamine analogs as VR1 capsaicin receptor antagonists for relieving pain

ΙN Bakthavatchatam, Rajagopal; Blum, Charles A.; Brielmann, Harry L.; Caldwell, Timothy M.; De Lombaert, Stephane

GI

TI

AB Substituted quinazolin-4-ylamine analogs (shown as I; variables defined below; e.g. (4-trifluoromethylphenyl)[7-(2-trifluoromethylphenyl)quinazoli n-4-yl]amine) are provided. Such compds. are ligands that may be used to modulate VR1 capsaicin receptor activity in vivo or in vitro (no data), and are particularly useful in the treatment of conditions associated with pathol. receptor activation in humans, domesticated companion animals and livestock animals. Pharmaceutical compns. and methods for using them to treat such disorders are provided, as are methods for using such ligands for receptor localization studies. For I; V, X, W, Y and  $\bar{Z}$  are each independently N or CR1, with the proviso that at least one of V and X is N; U is N or CR2, with the proviso that if V and X are N, then U is CR2; R1 = H, halogen, hydroxy, amino, C1-C8 alkyl, haloC1-C8alkyl, C1-C8alkoxy, haloC1-C8alkoxy and mono- and di(C1-C8alkyl)amino. R2 = (i) H, halogen, cyano, or -COOH; (ii) C1-C8alkanoyl, C2-C8alkanone, or C1-C8carbamate, each of which is (un) substituted with 1-9 substituents = Rb, or (iii) -Rc-M-A-Ry, wherein: Rc is C0-C3alkyl; M is a bond, N(Rz), O, S, SO2, (C:O)pN(Rz), N(Rz)(C:O)p, SO2N(Rz), or N(Rz)SO2, wherein p is 0 or 1; A is a bond or C1-C8alkyl, (un) substituted with 1-3 Rb. Ry and Rz, if present, are: (a) independently H, C1-C8alkyl, C2-C8alkenyl, C2-C8alkynyl, C6-C10arylC1-C8alkyl, C2-C8alkyl ether, C1-C8alkoxy, a 4- to 10-membered carbocycle or heterocycle, or joined to R1 to form a 4- to 10-membered carbocycle or heterocycle, wherein each Ry and Rz = (un) substituted with 1-9 Rb; or (b) joined to form a 4- to 10-membered carbocycle or heterocycle that is (un) substituted with 1-9 Rb; Ar2 is a 5- to 7-membered aromatic heterocycle, (un)substituted with 1-3 LRa. Ar1 is a 5- to 10-membered aromatic carbocycle or heterocycle, (un) substituted with 1-3 LRa; L = bond, -O-, -C(O)-, -OC(O)-, -C(O)O-, -O-C(O)O-, -S(O)m-, -NRx-,-C(0) NHRx-, -NHRxC(0)-, -NRxS(0)m-, -S(0) mNRx- and -N[S(0) mRx]S(0) m-; wherein m = 0, 1 and 2; and Rx = H and C1-C8alkyl; Ra = (i) H, halogen, cyano and nitro; and (ii) C1-C8alkyl, C2-C8alkenyl, C2-C8alkynyl, C2-C8alkyl ether, 3- to 10-membered heterocycles, mono- and di(C1-C8alkyl)amino and (3- to 10-membered heterocycle)C1-C6 alkyl, each of which is (un) substituted with 1-9 Rb. Rb = hydroxy, halogen, amino, aminocarbonyl, amido, cyano, nitro, C1-C8alkyl, C1-C8alkoxy, C1-C8alkylthio, C1-C8alkyl ether, hydroxyC1-C8alkyl, haloC1-C8alkyl, Ph, phenyl(C1-C8alkyl), mono and di(C1-C6 alkyl)amino, (SO2)C1-C8alkyl, 5- to 7-membered heterocycle and (5- to 7-membered heterocycle)(C1-C8alkyl). Although the methods of preparation are not claimed, many example prepns. and characterization data for >500 examples of I are included. SO PCT Int. Appl., 294 pp.

CODEN: PIXXD2

=>

## **EAST Search History**

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	202	vr1 adj antagonist	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/05/02 07:24
S2	16608	morphine	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/05/02 07:25
S3	46	S1 and S2	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR ·	ON	2007/05/02 07:37
S4	256	vr1 adj antagonist or vr1 adj modulator or capsaicin adj antagonist	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/05/02 07:37
S5	49	S2 and S4	US-PGPUB; USPAT; EPO; JPO; DERWENT	AND	ON	2007/05/02 07:59
S6	2	bakthavatchatam	US-PGPUB; USPAT; EPO; JPO; DERWENT	AND	ON	2007/05/02 08:42
S7	1	wo "2003074520"	US-PGPUB; USPAT; EPO; JPO; DERWENT	AND	ON	2007/05/02 08:52
S8	70	"5574052"	US-PGPUB; USPAT; EPO; JPO; DERWENT	AND	ON	2007/05/02 08:52